

University of Pennsylvania ScholarlyCommons

Wharton Pension Research Council Working Papers

Wharton Pension Research Council

9-1-2011

Retirement Behavior and the Global Financial Crisis

Jason J. Fichtner George Mason University, jfichtne@gmu.edu

John WR Phillips National Institute on Aging, john.phillips@nih.gov

Barbara A. Smith Social Security Administration, barbara.a.smith@ssa.gov

Follow this and additional works at: https://repository.upenn.edu/prc_papers

Part of the Economics Commons

Fichtner, Jason J.; Phillips, John WR; and Smith, Barbara A., "Retirement Behavior and the Global Financial Crisis" (2011). *Wharton Pension Research Council Working Papers*. 174. https://repository.upenn.edu/prc_papers/174

The published version of this Working Paper may be found in the 2012 publication: *Reshaping Retirement Security: Lessons from the Global Financial Crisis.*

This paper is posted at ScholarlyCommons. https://repository.upenn.edu/prc_papers/174 For more information, please contact repository@pobox.upenn.edu.

Retirement Behavior and the Global Financial Crisis

Abstract

Recent economic conditions have vastly changed the retirement landscape. Declines in assets as well as high unemployment changed the retirement plans of many Americans. Shocks to employment and wealth have likely influenced retirement behavior. This chapter provides a survey of the current literature on the influence of employment and wealth shocks on retirement and then makes use of administrative records on benefit applications to provide a preliminary analysis of changes in early retirement (age 62) claiming resulting from the recent economic downturn and implications. Since early claiming can have long lasting implications for retirement well being, we address how Americans learn about their retirement options.

Keywords

Retirement, wealth, shocks, economic downturn, Social Security, unemployment

Disciplines

Economics

Comments

The published version of this Working Paper may be found in the 2012 publication: *Reshaping Retirement Security: Lessons from the Global Financial Crisis.*

Lessons from the Global Financial Crisis

EDITED BY

Raimond Maurer, Olivia S. Mitchell, and Mark J. Warshawsky



OUP CORRECTED PROOF - FINAL, 11/8/2012, SPi

OXFORD UNIVERSITY PRESS

Great Clarendon Street, Oxford, OX2 6DP, United Kingdom

Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. Oxford is a registered trade mark of Oxford University Press in the UK and in certain other countries

© Pension Research Council, the Wharton School, the University of Pennsylvania 2012

The moral rights of the authors have been asserted

First Edition published 2012

Impression: 1

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of Oxford University Press, or as expressly permitted by law, by licence or under terms agreed with the appropriate reprographics rights organization. Enquiries concerning reproduction outside the scope of the above should be sent to the Rights Department, Oxford University Press, at the address above

> You must not circulate this work in any other form and you must impose this same condition on any acquirer

British Library Cataloguing in Publication Data Data available

Library of Congress Cataloging in Publication Data Data available

ISBN 978-0-19-966069-8

Printed in Great Britain by MPG Books Group, Bodmin and King's Lynn

OUP CORRECTED PROOF – FINAL, 11/8/2012, SPi

Contents

Li	st of Figures	ix
Li	st of Tables	xi
Li	st of Abbreviations	xiv
Ne	otes on Contributors	xvii
1.	Retirement Security and the Financial and	1
	Raimond Maurer, Olivia S. Mitchell, and Mark J. Warshawsky	1
	Part I. Rethinking Retirement in the New Economic Era	
2.	Changing Retirement Behavior in the Wake of the Financial Crisis Julia Coronado and Karen Dynan	13
3.	Potential Impacts of the Great Recession on Future Retirement Incomes Barbara A. Butrica, Richard W. Johnson, and Karen E. Smith	36
4.	Effects of the Economic Crisis on the Older Population: How Expectations, Consumption, Bequests, and Retirement Responded to Market Shocks <i>Michael Hurd and Susann Rohwedder</i>	64
5.	Retirement Behavior and the Global Financial Crisis Jason J. Fichtner, John W. R. Phillips, and Barbara A. Smith	81
	Part II. Rethinking the Resilience of Defined Contribution Plans	
6.	Trading in 401(k) Plans during the Financial Crisis Ning Tang, Olivia S. Mitchell, and Stephen P. Utkus	101
7.	Life Cycle Impacts of the Financial Crisis on Optimal Consumption—Portfolio Choices and Labor Supply Jingjing Chai, Raimond Maurer, Olivia S. Mitchell, and Ralph Rogalla	120

OUP CORRECTED PROOF - FINAL, 11/8/2012, SPi

viii Contents

8. A Stress Test for the Private Employer Defined Contribution System David Wray	151
Part III. How Defined Benefit Plans Handled the Financial Crisis	
9. Defined Benefit Pension Plans and the Financial Crisis: Impact and Sponsors and Government Reactions Mark J. Warshawsky	161
10. Multiemployer Pension Plans Respond to the Financial Crisis Judith F. Mazo and Eli Greenblum	188
11. Adopting Hybrid Pension Plans: Effects of Economic Crisis and Regulatory Reform Robert L. Clark, Alan Glickstein, and Tomeka Hill	215
12. Collective Pensions and the Global Financial Crisis: The Case of the Netherlands Lans Bovenberg and Theo Nijman	235
13. How Have Public Sector Pensions Responded to the Financial Crisis? Andrew G. Biggs	262
End Pages	273
THUER	411

Chapter 5

Retirement Behavior and the Global Financial Crisis

Jason J. Fichtner, John W. R. Phillips, and Barbara A. Smith

The financial crisis that began in 2008 resulted in a great and unanticipated loss of wealth for millions of Americans. The US stock market, as measured by the broad S&P 500 index, fell 56.7 percent from a peak on October 10, 2007 to a bottom on March 9, 2009.¹ Housing prices plummeted and unemployment rose quickly to double digits. General confidence in the financial system was greatly weakened. Though the broad stock market has recovered much of its losses, housing prices remain low. Unemployment is still high, with unemployment rates for workers aged 55–64 averaging 7 percent for the years 2009–10, compared to 3 percent for the period 2005–8 (BLS, 2011). Survey research suggests financial wealth declined by 15 percent for the median household as a result of the 2008 financial crisis (Shapiro, 2010).

These economic conditions have vastly changed the retirement landscape for millions of Americans, and have likely influenced retirement behavior. This chapter begins by providing a survey of the current literature on the influence of employment and wealth shocks on retirement.² Next, we analyze administrative records from the Social Security Administration (SSA) on benefit applications at age 62 to document the changes in retirement patterns resulting from the recent economic downturn and to consider implications for retirement security. Given the importance that Social Security benefits play in the retirement security of millions of Americans, and the possibility that the financial crisis is affecting retirement decisions, the chapter then addresses how SSA helps Americans prepare for retirement.

The effects of wealth shocks and employment on retirement behavior

The global financial crisis that began in 2008 and the resulting recession were notable for the speed at which the decline in financial markets,

housing, and employment occurred. Also notable was the widespread nature of the economic crisis, affecting a range of ages and income levels. According to data from the Health and Retirement Study (HRS),³ about 28 percent of HRS households reported that they had been affected 'a lot' by the financial crisis, 46 percent responded they had been affected 'a little', and only 26 percent reported not having been affected (Hurd and Rohwedder, 2010).

A sudden and unplanned drop in wealth and income can have significant effects on retirement behavior. Younger or middle-aged workers have more than a decade before retirement, and so they still have time to recover financial losses. A financial shock, such as steep drops in the value of stock prices, investment portfolios, and housing assets, might cause a delay in retirement plans,⁴ with workers remaining in the workforce longer than planned to rebuild retirement savings (Bosworth and Burtless, 2010). Those near or postretirement are more limited in their ability to attain or maintain a secure retirement. For those near retirement, a financial crisis might also change the timing of retirement.⁵ For current retirees, sudden declines in wealth from housing assets and financial portfolios might force immediate changes in consumption.

Research using the HRS data for 2008 and 2009 highlights the immediate impact of the financial crisis on retirement behavior (Hurd and Rohwedder, 2010).⁶ For those working in 2008, the authors compared data between the two survey years and found that in the 2009 HRS Internet survey, 61.7 percent of the 2009 respondents expected to work past age 62, up from 58.2 percent in the 2008 HRS.⁷ For those working in 2008, 46.4 percent of 2009 respondents expected to work past age 65, compared to 38.6 percent in the 2008 HRS.⁸ Thus, these results suggest that many are planning on working longer and retiring later as a result of the financial crisis. Hurd and Rohwedder conclude that '... the economic crisis has caused households in and near retirement to suffer sizeable losses in assets. These households responded in several ways: they reduced spending and with that increased saving, they intend to work longer, and anticipate bequeathing less.'9 Data from the Federal Reserve support Hurd and Rohwedder's finding, reporting that since the financial crisis the personal saving rate has trended upward from around 1 percent to around 6 percent (Glick and Lansing, 2011). All else equal, a reduction in wealth from a negative financial shock often results in workers near retirement increasing income and saving by remaining in the workforce or reducing planned consumption in retirement.¹⁰

The loss of a job can also affect retirement behavior. As Bosworth and Burtless (2010) note, 'At ages past 60 and especially past 65...reduced employment levels caused by a weak job market very quickly translate into reduced labor force participation rates.' An employment shock, such as a

Retirement Behavior 83

sudden loss of a job and a labor market with high unemployment might hasten the decision on both when to retire and when to begin receiving Social Security benefits. As noted earlier, the unemployment rate for workers aged 55-64 has more than doubled during the recent recession. Also, older workers who lose their jobs are likely to have longer durations of unemployment than are younger workers. According to recent data from the US Bureau of Labor Statistics (BLS), 49 percent of unemployed workers aged 55 or older had been unemployed for 27 weeks or longer, compared with 28 percent of unemployed workers aged 16-24 and 41 percent of unemployed workers aged 25-54 (BLS, 2010). A Congressional Research Service (CRS, 2007) study found that older workers who are unemployed have a higher incidence of withdrawing from the labor market. When they do so, they replace earnings with obvious sources of income, such as pensions and Social Security benefits. According to some studies, unemployment among older workers contributes significantly to the probability of retirement. All of these impacts will be amplified in the current recession. Though the decision to start receiving Social Security benefits can be contemporaneous with retirement, electing to receive benefits is not necessarily a predictor of leaving the workforce (Bosworth and Burtless, 2010). In actuality, the decision on whether to stop work can be completely independent from the decision to begin collecting Social Security benefits. For example, a worker might choose to stop working but delay receipt of Social Security benefits, to take advantage of higher monthly benefit amounts that accrue the later one waits to claim (up to age 70). Or a worker might decide to elect retirement benefits as early as 62, receiving a permanently reduced monthly benefit,¹¹ yet continue to work full- or part-time for continued income support.¹²

The net effect of a financial crisis and recession on retirement behavior is ambiguous. While some workers will delay retirement, others will exit the workforce earlier due to job loss. Thus, the decision to begin Social Security retirement benefits is intuitively correlated with leaving the workforce, but not necessarily. Accordingly, we might expect recessions to lead to an increase in those electing to begin receiving Social Security retirement benefits earlier.

Researchers have long recognized the role Social Security benefits play in a secure retirement.¹³ Social Security retirement benefits provide income security for millions of Americans, with 64 percent of all aged beneficiary units¹⁴ relying on Social Security for 50 percent or more of their income, and 34 percent relying on Social Security for 90 percent or more of their income (SSA, 2010*b*). Yet, because households at the lower end of the income and wealth distribution receive a larger share of their income from Social Security benefits, the financial crisis has affected these retirees less (Hurd and Rohwedder, 2010).

Data to study the retirement and saving effects due to the global financial crisis that began in 2008 are just beginning to become available, so additional

research is necessary to fully understand how retirement behavior has changed because of the shocks to wealth and employment of the past few years.

Are people electing to receive Social Security benefits early due to the financial crisis? A preliminary look at trends

Over time, there has been a relatively stable percentage of workers who elect to claim Social Security retirement benefits as soon as they become available (Muldoon and Kopcke, 2008). Annual data published by SSA show that between 1985 and 2009 the percentage of those claiming retirement benefits at age 62 has gradually declined in the case of women, while remaining relatively constant in the case of men (SSA, 2010*a*) (see Figure 5.1).

But these data do not accurately reflect the trends in claiming behavior by age (Muldoon and Kopcke, 2008), since they present claiming by calendar year, not by birth year or cohort. A more accurate way of assessing claiming behavior of 62-year-olds is to look at the percentage of each birth cohort that claims at age 62 (e.g. the percent of people born in 1946, who claim benefits at age 62 when first becoming eligible in 2008). Using cohort data, comparisons can be made across birth years to see if those born in the 1920s have



Figure 5.1 Percent of OASDI benefits awarded at age 62 *Source:* Derived from Table 6.B5 (SSA, 2010*a*).

OUP CORRECTED PROOF - FINAL, 11/8/2012, SPi

Retirement Behavior 85

different claiming behaviors than those born in the 1930s and early 1940s. Using the Continuous Work History Sample (CWHS),¹⁵ we calculated claiming patterns at age 62 for cohorts born between 1913 and 1947, including only those who are fully insured for benefits.¹⁶ Note, those born in 1913 first become eligible for reduced Social Security retirement benefits at age 62 in 1975, while those born in 1947 become eligible in 2009. These calculations are shown in Figure 5.2 and Appendix Table 5.1A.

For both men and women, there is a clear decrease in the percentage claiming at age 62 beginning in 1997, for the cohort born in 1935. As the number of women in the paid labor force increased, the percentage of those claiming benefits at 62 began to decline steadily, reaching a low of 36.3 percent in 2007 at the peak of the last economic expansion.

Men, who have traditionally had more consistent employment patterns, display a time series increase in benefit receipt at age 62. For men born in 1920, 41.1 percent elected to receive benefits when they turned age 62 in 1982. A pronounced 3 percentage-point increase occurred in 1983, as 44.2 percent of men born in 1921 elected to start receiving retirement benefits at age 62. The fraction of men taking early retirement benefits then trended upward from 1983 through 1993, reaching a peak of 49.1 percent. Beginning in 1997, the trend started to reverse, with a decline in the



Figure 5.2 Percent of fully insured workers who claim at age 62: cohorts born 1913–48 (by sex)

Source: Authors' calculation based on SSA administrative data, Continuous Work History Sample.

percentage of men claiming at age 62, reaching a new trough of 33.5 percent in 2007 (those born in 1945).

Did the financial crisis of 2008 result in an increase in those electing to receive early retirement benefits at age 62? While correlation is not causation, a preliminary analysis of the data do support the thesis that, in response to financial shocks and increases in unemployment, more people elected to begin taking Social Security retirement benefits as soon as they were eligible. In 2007, the year before the recession, 33.5 percent of fully insured men chose to begin retirement benefits at age 62, while 36.3 percent of fully insured men the security are before the recession begin successfully insured for the 1947 birth cohort who turned 62 in 2009 when the recession hit a low point, as 35.8 percent of fully insured men started receiving benefits and 38.9 percent of fully insured women followed suit. Similar patterns exist when the data is disaggregated by race, as shown in Figure 5.3.¹⁷

We conducted a similar analysis by state, to test whether states with higher unemployment rates also exhibited higher percentages of early claiming behavior at age 62. We used BLS data on state-level unemployment in 2009 and claiming information from the CWHS. The national unemployment rate was about 9.2 percent in 2009, and in that year, statelevel unemployment varied from 4 percent in North Dakota to 13 percent in Michigan. As Figures 5.4 and 5.5 show, higher unemployment in a state



Figure 5.3 Percent of fully insured workers who claim at age 62: cohorts born 1913–48 (by race)

Source: Authors' calculation based on SSA administrative data, Continuous Work History Sample.



Figure 5.4 Unemployment rates and percent claiming at age 62 by state (2009) *Note*: Percent claiming based on population aged 62.

Source: Authors' calculation based on SSA administrative data, Continuous Work History Sample.



Figure 5.5 Unemployment rates and percent claiming at age 62 across states (2009) *Note*: Percent claiming based on estimates of fully insured at age 62.

Source: Authors' calculation based on SSA administrative data, Continuous Work History Sample.

was correlated with a higher incidence of claiming at age 62 in 2009. We present the information two ways: first by showing the age-eligible population for claiming benefits, and second, by limiting the age-eligible population to only those fully insured for benefits. In both figures, a simple linear regression shows a positive relationship between unemployment and age 62 retirement claims (see Appendix Table 5.2A).¹⁸

How the Social Security Administration helps Americans prepare for retirement

A preliminary analysis of the data supports the thesis that more people will elect to begin taking Social Security retirement benefits as soon as eligible, due to financial shocks and increases in unemployment because of the global financial crisis. SSA plays a unique role in the financial security of millions of Americans, and in helping people better prepare for retirement in a postfinancial crisis world. Therefore, in 2009, the Agency undertook a special initiative to develop and refine print, web, and other products to better inform the public about retirement planning options and the importance personal savings contribute to a financially secure retirement (SSA, 2011*a*).

SSA decided to promote financial literacy in part because research found differences between how much people expect to receive in Social Security benefits when they retire, and what they actually receive. For example, only 19 percent of workers can correctly identify the age at which they will be eligible for full benefits from Social Security (EBRI and Mathew Greenwald & Associates, 2007). Further, the 2011 Retirement Confidence Survey (RCS) found that current workers are half as likely to expect Social Security to provide a major share of their income in retirement (33 percent) as current retirees are to say Social Security makes up a major share of their income (68 percent).¹⁹ However, research conducted by the Employee Benefit Research Institute (EBRI) found that 60 percent of those aged 65 or older received at least three-quarters of their income from Social Security in 2009 (EBRI, 2010). Additionally, although people are living longer, a significant fraction of workers continues to take Social Security benefits at age 62, even though this permanently reduces monthly benefits for the rest of their life. Also influencing SSA's decision to move forward with a special initiative to encourage saving was research linking financial literacy and saving behavior, indicating that the less financially literate are also less likely to plan for retirement (Lusardi and Mitchell, 2006, 2007, 2008, 2009; Lusardi, 2011).

SSA's first undertaking was to improve the Social Security Statement with modest changes to the content and language. Specifically, the agency

Retirement Behavior 89

changed the order in which benefit projections were displayed, to focus attention on the full retirement age instead of the early retirement age (age 62). The Statement was sent to all US workers age 25 or over, and it provided a personal record of their earnings and taxes paid, along with an estimated benefit of what the worker might receive in the future. Approximately 150 million Statements were mailed in 2010. Research has shown that the introduction of the Statement in 1995 had a significant impact on increasing workers' knowledge about Social Security benefits (Mastrobuoni, 2009).²⁰ Surveys commissioned by SSA also found that those respondents who stated they had received a Statement were better informed than those who did not recall receiving one. Additionally, the Social Security Advisory Board (SSAB) recognized that the Statement is the 'most direct and important means of communicating with the public' about Social Security benefits (SSAB, 2009).

Along with the modest content and language changes in the Statement (SSAB, 2009), SSA also created two one-page, double-sided inserts to accompany the Statement. The first insert entitled 'Thinking of Retiring?' was included in Statements sent to workers aged 55+, beginning in October 2000. It addressed important topics, including the reduction in benefits that occurs if one elects to begin benefits before full retirement age, the role of survivor and spousal benefits, and the fact that the decisions to stop work and begin collecting benefits can be made independent of one another. The insert also provided information on how workers could go to the SSA's website and use online tools to estimate retirement benefits.

The second insert entitled 'What Young Workers Should Know About Social Security and Saving' was issued in February 2009 and was designed for workers aged 25–35. It informed younger workers that Social Security is a form of social insurance that provides disability and retirement benefits, while stressing the importance of personal savings for a financially secure retirement. Additionally, the insert informed its young readers that Social Security benefits are designed to replace approximately 40 percent of income in retirement, but financial planners suggest that retirees will need to replace 70–80 percent of preretirement income for a secure retirement. Accordingly, individuals will need to make up the difference with personal saving or pensions.

An additional one-page, double-sided information pamphlet was also created to address one of the most important questions people ask SSA, namely 'What is the best age to start receiving retirement benefits?' The document entitled 'When to Start Receiving Retirement Benefits' stresses that when to begin benefits is a very personal decision and that no simple answer is correct for everyone. This document indicated that monthly

benefits vary substantially, depending on the age one begins receiving benefits. It also noted that retirement may be longer than most people expect, and it highlighted that one's decision about when to begin benefits might also affect the benefits a person's family is eligible to receive. Finally, it also explained the rules regarding working and receiving benefits. This document was distributed to all SSA field offices (approximately 1,300) and it is available on the agency's website.²¹

The SSA also supported an extramural program of research on retirement, including several interdisciplinary projects on financial literacy, decision-making, and behavior change. The research goals were to learn the most effective ways to help foster retirement and other saving strategies at all stages of the life cycle, to help low- and moderate-income populations successfully plan and save for retirement and other life events, and to improve understanding of Social Security's programs. The goal was to have the findings inform Social Security's efforts (statement, web, program design, etc.) as well as spillover to other relevant areas, such as employersponsored retirement programs.

Several of the financial literacy projects have produced promising results. For example, an innovative study used the American Life Panel to experiment with different ways of framing monthly benefit information (Brown et al., 2010). The authors held constant the factual information presented, but varied on how the information was presented to highlight the financial gains of delaying or claiming. That study found that framing information strongly shaped respondents' expected claiming ages.

Due to the tightening of federal budgets in 2011, the SSA curtailed its efforts in the financial literacy domain. Moreover, the agency suspended the mailing of the Statement to workers, and limited research expenditures for financial literacy projects.²²

Conclusion

The financial crisis that began in 2008 resulted in substantial and unanticipated job loss and loss of wealth for millions of people. Many Americans responded by reducing consumption and increasing saving. Moreover, based on a preliminary analysis of the data, it also seems that some will elect to receive retirement benefits at age 62, reversing the precrisis trend to file at later ages. Further research will be required to confirm this trend.

OUP CORRECTED PROOF - FINAL, 11/8/2012, SPi

Retirement Behavior 91

Appendix

APPENDIX TABLE 5.A1 Beneficiary claiming rates, by birth cohort

Birth cohort	Year at age 62	Beneficiary claimin	ng rates at age 62 (%)
		Male	Female
1913	1975	37.0	50.2
1914	1976	39.9	50.9
1915	1977	36.9	49.6
1916	1978	37.0	47.3
1917	1979	36.2	48.2
1918	1980	41.2	50.4
1919	1981	42.4	50.7
1920	1982	41.1	50.5
1921	1983	44.2	50.9
1922	1984	44.4	51.2
1923	1985	46.4	51.8
1924	1986	48.2	52.2
1925	1987	46.4	50.6
1926	1988	46.5	50.0
1927	1989	47.1	49.7
1928	1990	48.0	49.2
1929	1991	48.3	49.4
1930	1992	48.8	51.6
1931	1993	49.1	51.1
1932	1994	48.4	52.2
1933	1995	47.6	49.5
1934	1996	48.4	51.5
1935	1997	46.5	47.7
1936	1998	46.5	48.7
1937	1999	45.3	48.2
1938	2000	45.1	48.7
1939	2001	43.4	43.9
1940	2002	42.7	45.2
1941	2003	40.1	43.3
1942	2004	40.6	44.9
1943	2005	38.5	40.1
1944	2006	34.6	37.9
1945	2007	33.5	36.3
1946	2008	35.1	38.3
1947	2009	35.8	38.9
1948	2010	35.3	36.6

Source: Authors' calculations based on SSA administrative data, Continuous Work History Sample.

Appen	dix Table 5.A2 Une	mployment rates and p	ercentage clain	ning at age 62 :	across states (2009)		
State	Number of beneficiaries aged 62 in 2009 (1947 birth cohort) (hundreds)	(Total no. of fully insured at age 62 in 2009) × (state population/US population)	State population/ US population aged 62	Population aged 62 in 2009	Unemployment rate in 2009	Beneficiaries as a % of population aged 62	Beneficiaries as a % of estimate of fully insured
AL	205	44,478.5	0.01593	57,144	9.7	35.9	46.1
AK	16	5,845.5	0.00209	7,510	7.8	21.3	27.4
AZ	293	55,619.9	0.01992	71,458	9.7	41.0	52.7
AR	128	27,826.3	0.00997	35,750	7.4	35.8	46.0
\mathbf{CA}	1,047	298,828.7	0.10703	383,922	11.3	27.3	35.0
00	174	44,969.6	0.01611	57, 775	8.3	30.1	38.7
CT	128	35,010.5	0.01254	44,980	8.3	28.5	36.6
DE	44	8,799.3	0.00315	11,305	8	38.9	50.0
DC	14	5,351.2	0.00192	6,875	9.6	20.4	26.2
FL	899	178,050.9	0.06377	228, 752	10.2	39.3	50.5
\mathbf{GA}	378	82,601.7	0.02959	106, 123	9.7	35.6	45.8
IH	59	11,532.9	0.00413	14,817	6.8	39.8	51.2
Ð	67	13, 222.0	0.00474	16,987	7.7	39.4	50.7
IL	414	112,966.2	0.04046	145, 134	10	28.5	36.6
Z	285	58,991.0	0.02113	75,789	10.4	37.6	48.3
IA	143	28,046.6	0.01005	36,033	5.6	39.7	51.0
KS	102	25,230.5	0.00904	32,415	7.1	31.5	40.4
KY	163	42,062.5	0.01507	54,040	10.7	30.2	38.8
LA	146	40,492.5	0.01450	52,023	6.6	28.1	36.1
ME	64	14,980.3	0.00537	19,246	8.2	33.3	42.7
MD	150	53,835.1	0.01928	69,165	7.1	21.7	27.9
MA	156	65,027.9	0.02329	83,545	8.2	18.7	24.0
IW	513	97,105.6	0.03478	124,757	13.3	41.1	52.8
MN	199	47,005.0	0.01684	60,390	8.1	33.0	42.3
MS	128	26,250.1	0.00940	33,725	9.6	38.0	48.8

	.02022 12,000	9.0	50.8	40.1
MT 50 9,886.7 0.00354 12,702	00354 12,702	6.3	39.4	50.6
NE 56 15,556.3 0.00557 19,986	00557 19,986	4.8	28.0	36.0
NV 124 23,913.5 0.00857 30,723	00857 $30,723$	12.5	40.4	51.9
NH 72 14,037.7 0.00503 18,035	00503 18,035	6.3	39.9	51.3
NJ 260 82,716.1 0.02963 106,270	02963 $106,270$	9.1	24.5	31.4
NM 69 18,493.0 0.00662 23,759	00662 23,759	7	29.0	37.3
NY 649 184,802.4 0.06619 237,426	06619 $237,426$	8.4	27.3	35.1
NC 454 87,542.7 0.03135 112,471	03135 112,471	10.8	40.4	51.9
ND 24 5,468.0 0.00196 7,025	00196 7,025	4.3	34.2	43.9
OH 505 114,418.6 0.04098 147,000	04098 147,000	10.1	34.4	44.1
OK 155 33,933.3 0.01215 43,596	01215 $43,596$	6.6	35.6	45.7
OR 232 39,404.4 0.01411 50,625	01411 50,625	11.1	45.8	58.9
PA 521 127,503.6 0.04567 163,811	.04567 163,811	8	31.8	40.9
RI 48 10,459.6 0.00375 13,438	00375 13,438	10.8	35.7	45.9
SC 241 45,298.1 0.01622 58,197	.01622 58,197	11.3	41.4	53.2
SD 39 7,136.0 0.00256 9,168	.00256 9,168	5 J	42.5	54.7
TN 333 61,367.3 0.02198 78,842	02198 78,842	10.4	42.2	54.3
TX 693 189,256.9 0.06779 243,149	06779 243,149	7.6	28.5	36.6
UT 67 17,762.1 0.00636 22,820	.00636 22,820	7.1	29.4	37.7
VT 27 6,842.5 0.00245 8,791	00245 8,791	6.9	30.7	39.5
VA 278 74,087.2 0.02654 95,184	02654 95,184	6.8	29.2	37.5
WA 267 64,081.4 0.02295 82,329	.02295 82,329	9.3	32.4	41.7
WV 75 20,174.3 0.00723 25,919	00723 $25,919$	7.7	28.9	37.2
WI 270 52,147.6 0.01868 66,997	01868 66,997	8.7	40.3	51.8
WY 17 5,122.4 0.00183 6,581	.00183 $6,581$	6.5	25.8	33.2
Notes: Total US population aged 62 in 2009 = 3,587,039; total fully insured population at Source: Authors' calculations based on SSA administrative data, Continuous Work History	ully insured population at age Continuous Work History Sa	62 in 2009 = 2,792,00 mple (BLS, 2011).	00.	

OUP CORRECTED PROOF – FINAL, 11/8/2012, SPi

Endnotes

- 1. Data available from Yahoo! Finance. S&P 500 index value at market close on October 10, 2007 was 1,562.47. Index value at close on March 9, 2009 was 676.53. The National Bureau of Economic Research, the arbiter of the start and end dates of a recession, determined that the recession that began in December 2007 ended in June 2009, roughly coinciding with the peak and trough dates of the S&P 500 index.
- 2. Retirement in this paper refers to withdrawal from the labor force. Thus, retirement as defined here does not necessarily coincide with benefit claiming.
- 3. The HRS is a longitudinal survey of health, retirement, and aging that has been conducted every two years since 1992 and interviews more than 22,000 Americans over the age of 50. For more information on the HRS, see http://hrson-line.isr.umich.edu.
- 4. In this context, 'retirement plans' refers to peoples' goals, strategies, and behaviors, not to defined contribution or defined benefit retirement plans.
- 5. The timing of retirement can be affected by more than age, including accumulated savings, the availability of an employer-provided pension, the willingness or ability to continue working part-time in retirement, personal health, access to health coverage, and general economic conditions.
- 6. Although the time between the 2008 HRS interview and a subsequent 2009 HRS Internet survey was insufficient to observe actual behavior, the data nonetheless can be used to shed light on retirement expectations (Hurd and Rohwedder, 2010).
- 7. What is described here are the expectations of working past either age 62 or age 65. Hurd et al. (2005) have found that these retirement expectations are predictive of actual retirement.
- 8. See Hurd and Rohwedder (2010: 20, tables 10 and 11).
- 9. See Hurd and Rohwedder (2010: 11).
- 10. For a theoretical model of this behavior, see Chai et al. (2012) (this volume).
- 11. Social Security benefits taken between ages 62 and the full retirement age (FRA), currently 65 or 66 depending upon birth year, are actuarially reduced so that the expected value of total lifetime benefits received is approximately the same, regardless of when benefits are claimed.
- 12. Income earned by individuals who claim benefits prior to attaining the FRA is subject to the retirement earnings test. There are two different exempt amounts, depending upon when the individuals attain FRA. For individuals claiming benefits and working in 2011 but attaining FRA in 2012 or later, the annual exempt amount in 2011 is \$14,160. For those individuals attaining FRA in 2011, the exempt amount is \$37,680 and applies only to income earned in the months prior to attaining FRA. After attaining FRA, individuals are no longer subject to the earnings test. SSA withholds \$1 in benefits for every \$2 in earnings in excess of the lower exempt amount and \$1 in benefits for every \$3 of earnings in excess of the higher exempt amount.
- 13. For a summary of research work on this area, see Burkhauser et al. (2009).
- 14. An aged unit is either a married couple living together or an unmarried person, which also includes persons who are separated or married but not living

Retirement Behavior 95

together. A married couple's age is defined as the age of the husband—unless he is under age 55 and the wife is 55 or older, in which case it is the age of the wife. The example in the paper refers to aged units that are 65 years of age or older. In this case, the age of the married couple is the age of the husband if he is 65 or older; if the husband is younger than 55 and the wife is aged 65 or older, the age of the married couple is the age of the wife. See https://www.social security.gov/policy/docs/statcomps/income_pop55/2008/incpop08.pdf.

- 15. The CWHS is the oldest major longitudinal sample data source in the federal statistical system. It contains demographic, earnings, and benefit data. For more information about the CWHS, see 'The Social Security Administration's Continuous Work History Sample': www.ssa.gov/policy/docs/ssb/v52n10/v52n10p20.pdf.
- 16. Individuals must be insured under the Social Security program before retirement, survivors, or disability benefits can be paid to workers or their spouses and dependents. Social Security considers the number of quarters of coverage earned to determine insured status. A quarter of coverage (QC)—also called a 'credit'—is earned for a certain amount of work covered under Social Security, but no more than four QCs can be earned in a given year. Generally, a person needs to be 'fully insured' to receive Social Security benefits, but other requirements may also apply. To be fully insured, a person needs at least one QC for each calendar year after turning 21 and the earliest of the following: (*a*) the year before age 62; (*b*) the year before death; or (*c*) the year of becoming disabled. For more information, see http://www.socialsecurity.gov/OACT/ ProgData/insured.html.
- 17. We include the results disaggregated by race because we thought that a natural question to ask would be whether our findings hold for different demographic subgroups. Our future research will analyze in more depth changes in claiming behavior in subgroups of the population.
- 18. Using a simple linear regression of state-level unemployment and age-62 claiming, the relationship is significant at the 9 percent level.
- 19. The percentages in parentheses refer to the fraction of respondents reporting the stated response.
- 20. Prior to 2000, the Social Security Statement was known as the Personal Earnings and Benefit Estimate Statement (PEBES).
- 21. For a copy of this document, see www.ssa.gov/pubs/10147.pdf.
- 22. In recent testimony, the SSA Commissioner stated that to conserve funds, the agency would suspend the current contract to mail out the Statement (SSA, 2011*c*).

References

Bosworth, G. and G. Burtless (2010). "Recessions, Wealth Destruction, and the Timing of Retirement", CRR Working Paper No. 2010–22. Chestnut Hill, MA: Center for Retirement Research at Boston College.

- Brown, J., A. Kapteyn, and O. S. Mitchell (2010). "Framing Effects and Social Security Claiming Behavior", Working Paper WR-793-SSA. RAND Corporation Financial Literacy Center.
- Bureau of Labor Statistics (BLS) (2010). Issues in Labor Statistics, Summary 10-04. Washington, DC: US Department of Labor. www.bls.gov/opub/ils//summary_10_04/older_workers.htm
- (2011). Labor Force Statistics from the Current Population Survey. Washington, DC: US Department of Labor. www.bls.gov/data/#unemployment
- Burkhauser, R., A. Gustman, J. Laitner, O. S. Mitchell, and A. Sonnega (2009). "Social Security Research at the Michigan Retirement Research Center," *Social Security Bulletin*, 69(4): 51–64.
- Chai, J., R. Maurer, O. S. Mitchell, and R. Rogalla (2012). "Lifecycle Impacts of the Financial and Economic Crisis on Household Optimal Consumption, Portfolio Choice, and Labor Supply", in R. Maurer, O. S. Mitchell, and M. J. Warshawsky, eds., *Reshaping Retirement Security: Lessons from the Global Financial Crisis*. Oxford, UK: Oxford University Press.
- Congressional Research Service (CRS) (2007). CRS Report for Congress, Unemployment and Older Workers. Washington, DC: United States Congress.
- Employee Benefit Research Institute (EBRI) (2010). *EBRI Databook on Employee Benefits*, Chapter 7, Updated October 2010. Accessed March 20, 2011. http://ebri.org/pdf/publications/books/databook/DB.Chapter%2007.pdf
- EBRI and Mathew Greenwald & Associates, Inc. (2007). *Retirement Confidence Survey*. http://www.ebri.org/surveys/rcs/
- Glick, R. and K. J. Lansing (2011). "Consumers and the Economy, Part I: Household Credit and Personal Saving", *FRBSF Economic Letter*, Number 2011-01. San Francisco, CA: Federal Reserve Board of San Francisco.
- Hurd, M. and S. Rohwedder (2010). "The Effects of the Economic Crisis on the Older Population", MRRC Working Paper No. 2010-231. Ann Arbor, MI: Michigan Retirement Research Center.
- —, M. Renti, and S. Rohwedder (2005). *The Effect of Large Capital Gains or Losses* on *Retirement*. http://www.nber.org/books_in_progress/boulders05/hurd-et-al8-9-06.pdf.
- Lusardi, A. (2011). "Americans' Financial Capability", PRC Working Paper No. WP2011-02. Philadelphia, PA: Pension Research Council, The Wharton School, University of Pennsylvania.
- and O. S. Mitchell (2006). "Financial Literacy and Planning: Implications for Retirement Wellbeing", MRRC Working Paper No. 2006-114. Ann Arbor, MI: Michigan Retirement Research Center.

— and — (2007). "Baby Boomer Retirement Security: The Role of Planning, Financial Literacy, and Housing Wealth", *Journal of Monetary Economics*, 54: 205–24. — and — (2008). "Planning and Financial Literacy: How Do Women Fare?",

American Economic Review, 98: 413–17.

Retirement Behavior 97

- and (2009). "How Ordinary Consumers Make Complex Economic Decisions: Financial Literacy and Retirement Readiness", NBER Working Paper No. 15350. Cambridge, MA: National Bureau of Economic Research.
- Mastrobuoni, G. (2009). "The Role of Information for Retirement Behavior: Evidence Based on the Stepwise Introduction of the Social Security Statement", CRR Working Paper No. 2009-23. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Muldoon, D. and R. W. Kopcke (2008). "Are People Claiming Social Security Benefits Later?", CRR Issue Brief Number 8-7. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Shapiro, M. D. (2010). "The Effects of the Financial Crisis on the Well-Being of Older Americans: Evidence from the Cognitive Economics Study", MRRC Working Paper No. 228. Ann Arbor, MI: Michigan Retirement Research Center.
- Social Security Administration (SSA) (2010a). "Table 6.B5", Annual Statistical Supplement, 2010. Washington, DC: SSA.
- (2010b). "Relative Importance of Social Security, 2008", Fast Facts & Figures, August. Washington, DC: SSA. Accessed March 20, 2011. http://www.ssa.gov/ policy/docs/chartbooks/fast_facts/2010/fast_facts10.html#agedpop
- (2011*a*). Agency Strategic Plan Fiscal Years 2008–2013. Washington, DC: SSA. http://www.socialsecurity.gov/asp/plan-2008-2013.html
- (2011b). "Understanding the Benefits," SSA Publication No. 05-10024. Washington, DC: SSA. http://www.socialsecurity.gov/pubs/10024.html
- (2011*c*). *Statement for the Record*, Testimony of Commissioner Michael J. Astrue before the Subcommittee on Labor, Health and Human Services, Education, and Related Agencies, Committee on Appropriations, United States Senate, March 9, 2011.
- Social Security Advisory Board (SSAB) (2009). The Social Security Statement: How It can be Improved. Washington, DC: SSAB.

OUP CORRECTED PROOF – FINAL, 11/8/2012, SPi